THE MINISTER OF STATE IN THE MINISTRY OF NON-CONVENTIONAL ENERGY SOURCES (SHRI S. KRISHNA KUMAR): (a) to (c) Yes, Sir. UNDP/ OEF have approved a technical assistance project designed to assist the Govt, of India in the optimum development and utilisation of Small Hydel resources in the Himalayan and Sub-Himalayan regions of the country. The project to be implemented over a duration of 42 months envisages UNDP assistance of US $ 7.5 million and Indian counterpart funding of Rs. 22.48 crores in kind.

(d) and (e) As the Project Area comprises hilly areas of 13 States of the Himalayan and Sub-Himalayan regions, the hilly areas of Andhra Pradesh are not covered under the project.

Commissioning of Small Hydel Plants

3201. SHRI YERRA NARAYANASWAMY: Will the PRIME MINISTER be pleased to state:

(a) the details of provision made for loan by Indian Renewable Energy Development Agency (IREDA) in the 8th Plan period for Small Hydel Plants, State-wise;

(b) by when the Small Hydel Plants would be commissioned; and

(c) the steps proposed to increase the tempo of work and popularisation of small Hydel Plants?

THE MINISTER OF STATE IN THE MINISTRY OF NON-CONVENTIONAL ENERGY SOURCES (SHRI S. KRISHNA KUMAR): (a) A target of loan amount of Rs.200.86 crores to be disbursed during the 8th Plan has been fixed. IREDA does not fix any State-wise targets. The projects are sanctioned as and when received from different entrepreneurs.

(b) Small Hydel Plants are expected to be commissioned within 36 months from the zero date.

(c) Steps taken by IREDA include; Obtaining a World Bank line of credit of US $70 million exclusively for Small Hydel Sector, preparation of Manual on Small Hydro to help the entrepreneurs in preparing Detailed Project Reports and to implement the projects; organising Business Meets with prospective developers, conducting Workshops and Seminars on the subject; launching of information and dissemination campaigns to create greater awareness; and providing Consultancy Services, IREDA is also negotiating additional international bilateral assistance in Small Hydro Sector.

Financial Guarantees of Government on Non-Conventional Energy

3202. SHRI KANAKSINH MOHANSINH MANGROLA: Will the PRIME MINISTER be pleased to state:

(a) what is the percentage share of non-conventional energy in the total power generation in the country with sourcewise break up of solar, wind tidal etc;

(b) whether Government propose to increase share of non-conventional sources in total power generation of country, if so, how it is proposed to be done;

(c) whether Government are considering to put power generation from non-conventional sources at par with that of the traditional sectors with regard to minimum assured return on investment, financial guarantees of Union Government etc., if so, what are the details thereof; and

(d) if not, what are the reasons therefor?

THE MINISTER OF STATE IN THE MINISTRY OF NON-CONVBNTIONAL ENERGY SOURCES (SHRI S. KRISHNA KUMAR): (a) The aggregate installed capacity for power generation through non-conventional energy sources is about 2S8 MW, (Wind-122 MW; small hydro; 110 MW; biomass gasifier system-10 MW; solar photovoltaic systems-9 MW; bagasse co-generation-7.5 MW) which works out to be about 0.37% of the total power capacity in the country.

(b)Yes, Sir. The Government has prepared a new strategy and action plan in which, the original target of600 MW for power generation from non-conventional energy sources has been raised to 2000 MW for Eighth Plan. For achieving this, the programmes are given market orientation to make the commercially viable and sustainable. Private sector if being

encouraged through a package of incentives to participate in power generation programmes. Resources are being mobilised from financial institutions, private investments and external assistance. World Bank's lines of credit are available for private sector wind farms, small hydro and solar photovoltaic projects.

(c) and (d) Compared to conventional power projects, capacity utilisation parameters are different for non-conventional energy based power projects which are site specific. However, in addition to incentives already available from the Centre, where applicable, other attractive fiscal and promotional incentives including wheeling, banking, third party sale and minimum buy back rate have also been suggested to the State to encourage private investment.

Solar Power Plant In Collaboration with Israel

3203. SHRI T. VENKATRAM REDDY: Will the PRIME MINISTER be pleased to state:

(a) whether Government propose to set up any solar power plant in the country in collaboration with Israel;

(b) if so, the details thereof; and

(c) by when the above plant is likely to be setup?

THE MINISTER OF STATE IN THE MINISTRY OF NON-CONVENTIONAL ENERGY SOURCES (SHRI S. KRISHNA KUMAR): (a) to (c) There is no proposal to set up a Solar Power Plant in collaboration with Israel. However, a detailed Project Report for a 30 MW Solar Thermal Power Project, near Jodhpur in Rajasthan is under preparation in association with an Israeli Company.

Popularisation of Solar Heating System

3204. SHRI BHAGABAN MAJHI: Will the PRIME MINISTER be pleased to state:

(a) whether Government have a proposal to popularise solar heating systems in different States;

(b) if so, the plan drawn up therefor; and

(c) the steps taken in that regard in Orissa?

THE MINISTER OF STATE IN THE MINISTRY OF NON-CONVENTIONAL ENERGY SOURCES (SHRI S. KRISHNA KUMAR): (a) Yes, Sir.

(c) The Government have been popularising the solar heating systems in the country for water heating, air heating, desalination and cooking applications through various promotional incentives. Soft loans are being made available for the installation of solar heating systems through Indian Renewable Energy Development Agency (IREDA). Solar thermal systems are also being popularised through various publicity measures.

(c) About 2300 square mtrs. of collector area have been installed for various solar heating systems and about 1100 solar cookers have been sold in the State of Orissa.

Production of Wind Energy in India

3205. SHRI BHUPINDER SINGH MANN: Will the PRIME MINISTER be pleased to state:

(a) what are the potentials of wind mill energy production in India;

(b) whether any survey was conducted in this regard; if so, the details thereof; and

(c) what are die potential areas alongwith other requirements for production of such energy?

THE MINISTER OF STATE IN THE MINISTRY OF NON-CONVENTIONAL ENERGY SOURCES (SHRI S. KRISHNA KUMAR): (a) The wind power potential is estimated at about 20.000MW in the country.

(b) Yes, Sir. A National Wind Resource Assessment Programme Is being undertaken in 25 States/U.T.s, to assess the potential and identify suitable locations for wind power generation.

(c) 69 sites having annual mean wind speeds of more man 18 kmph have been identified in